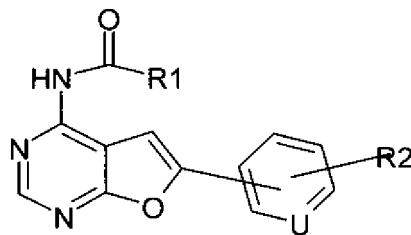


Amendments To The Claims:

Please amend the claims as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A compound of the formula I, or a salt, or solvate, or a physiologically functional derivative thereof:



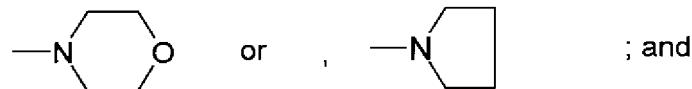
I

in which

U is CH or N; and

R1 is C₁₋₆alkyl, C₃₋₈cycloalkyl, -CH₂CH₂SCH₃, -CH₂-C₃₋₈cycloalkyl, phenyl optionally substituted with halogen or nitro; or

R1 is a radical of formula



when U is CH, R2 is hydrogen, halogen, C₁₋₆alkyl, or -OCH₃; and

when U is N, R2 is hydrogen.

2. (Currently amended) A method for the treatment or prophylaxis of a disorder in a mammal, said disorder being characterized by misregulation of

GSK-3, comprising, administering to the mammal a therapeutically effective amount of a compound of the formula I of claim 1 or a salt, or solvate, or a physiologically functional derivative thereof.

3. (Original) The disorder of claim 2 that is selected from the list consisting of diabetes, obesity, Alzheimer's Disease, bipolar disorder, schizophrenia, stroke, baldness, hair loss, atherosclerotic cardiovascular disease, hypertension, polycystic ovary syndrome, ischemia, immunodeficiency, and cancer.

4. (Currently amended) A pharmaceutical composition ~~compositions~~ comprising a therapeutically effective amount of a compound of formula I of claim 1, or a salt, or solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

5. (Currently amended) A method of treating Type II Diabetes in a mammal, said method comprising administering to said mammal a therapeutically effective amount of a compound of formula I of claim 1, or salt, or solvate or physiologically functional derivative thereof.

6. (Currently amended) A compound of formula I as claimed in claim 1, wherein said compound is of claims 1-5 selected from the group consisting of

Hexanoic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

N-[6-(4-Methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-isobutyramide;

Cyclopentanecarboxylic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

N-[6-(4-Methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-3-methylsulfanyl-propionamide;

3-Fluoro-N-[6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-benzamide;

Cyclohexanecarboxylic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

Cyclopropanecarboxylic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

Furan-2-carboxylic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

2-Cyclopentyl-N-[6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-acetamide;

N-[6-(4-Methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-3-nitro-benzamide;

N-[6-(4-Methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-4-nitro-benzamide;

Cyclopentanecarboxylic acid (6-phenyl-furo[2,3-d]pyrimidin-4-yl)-amide;

Cyclopropanecarboxylic acid (6-phenyl-furo[2,3-d]pyrimidin-4-yl)-amide;

Cyclopentanecarboxylic acid [6-(4-chloro-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

Cyclopropanecarboxylic acid [6-(4-chloro-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

Cyclopentanecarboxylic acid (6-p-tolyl-furo[2,3-d]pyrimidin-4-yl)-amide;

Cyclopropanecarboxylic acid (6-p-tolyl-furo[2,3-d]pyrimidin-4-yl)-amide;

Cyclopentanecarboxylic acid [6-(4-fluoro-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

Cyclopropanecarboxylic acid [6-(4-fluoro-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide;

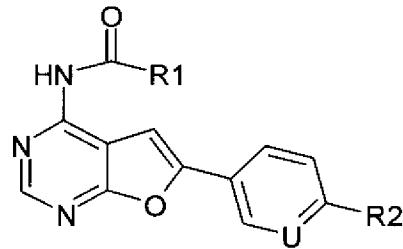
Cyclopentanecarboxylic acid (6-pyridin-3-yl-furo[2,3-d]pyrimidin-4-yl)-amide;
and

Cyclopropanecarboxylic acid (6-pyridin-3-yl-furo[2,3-d]pyrimidin-4-yl)-amide;

Morpholine-4-carboxylic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide; and

Pyrrolidine-1-carboxylic acid [6-(4-methoxy-phenyl)-furo[2,3-d]pyrimidin-4-yl]-amide.

7. (New) A compound of formula I or salt or solvate thereof as claimed in claim 1, wherein said compound has the following formula:

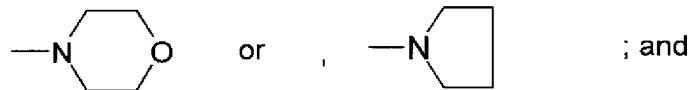


wherein

U is CH or N; and

R1 is C₁₋₆alkyl, C₃₋₈cycloalkyl, -CH₂CH₂SCH₃, -CH₂-C₃₋₈cycloalkyl, phenyl optionally substituted with halogen or nitro; or

R1 is a radical of formula



when U is CH, R2 is hydrogen, halogen, C₁₋₆alkyl, or -OCH₃; and

when U is N, R2 is hydrogen.